Kidney Transplantation: The Donor Story

By

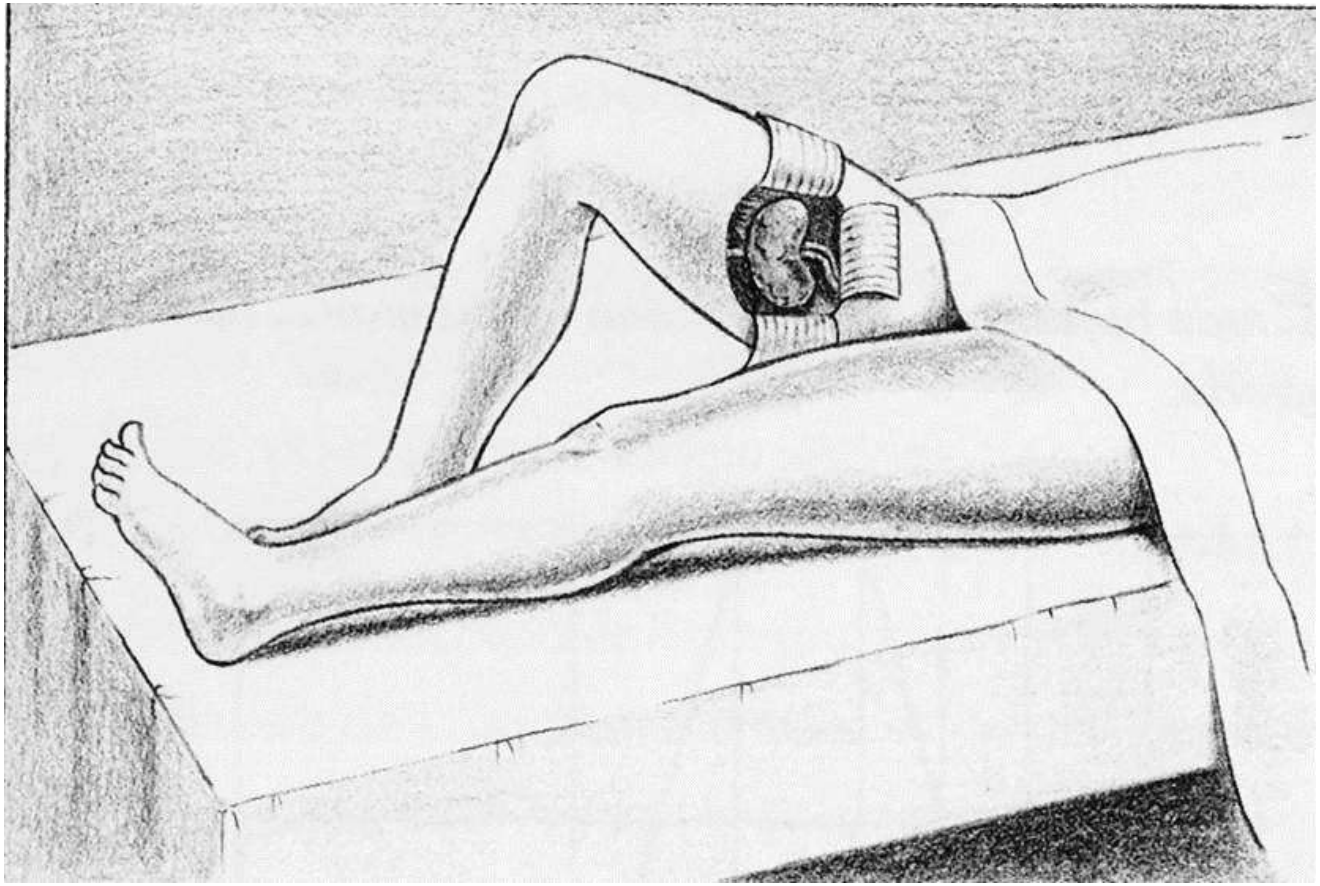
Dr. Ahmed Mohammed Abd El Wahab

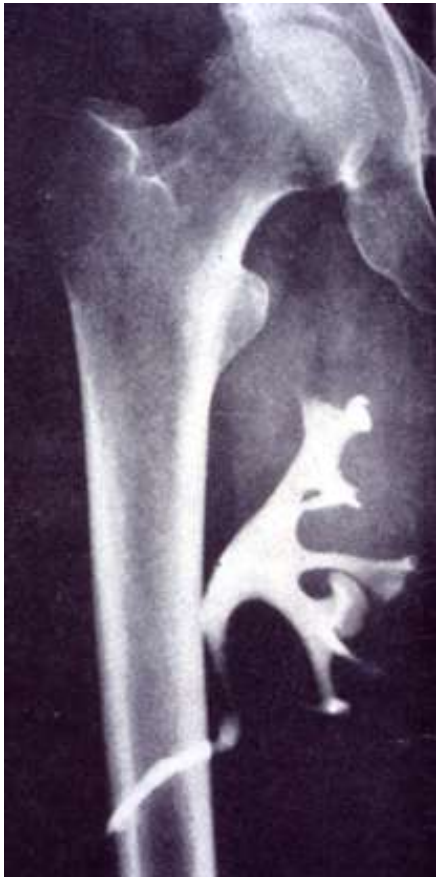
Lecturer of internal medicine

(Nephrology)

Mansoura University

History



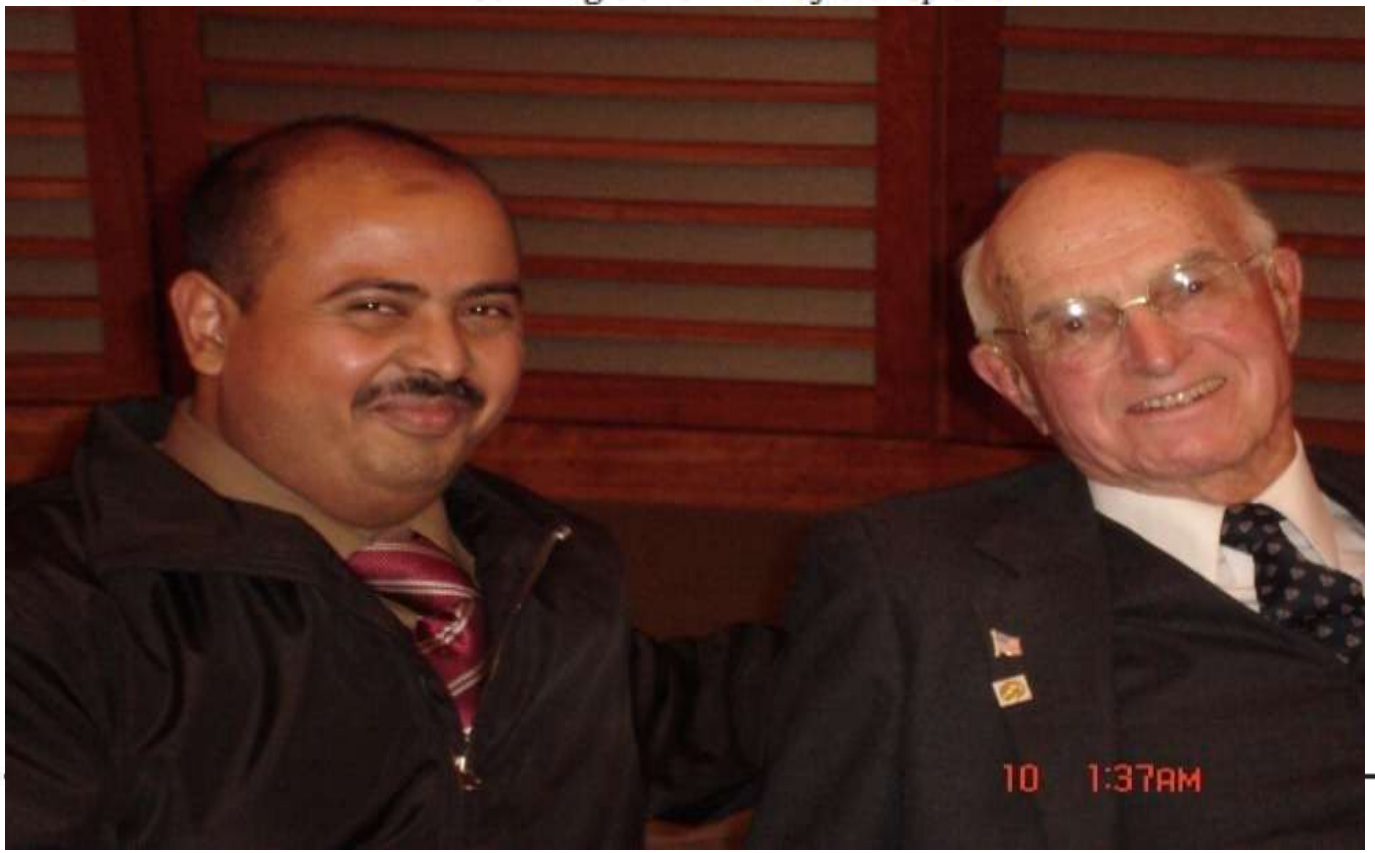


The first human kidney allograft by Voronoy in 1933

History

Historical Highlights of Organ Transplantation in the US.

Year	Event
1954	First living donor kidney transplant



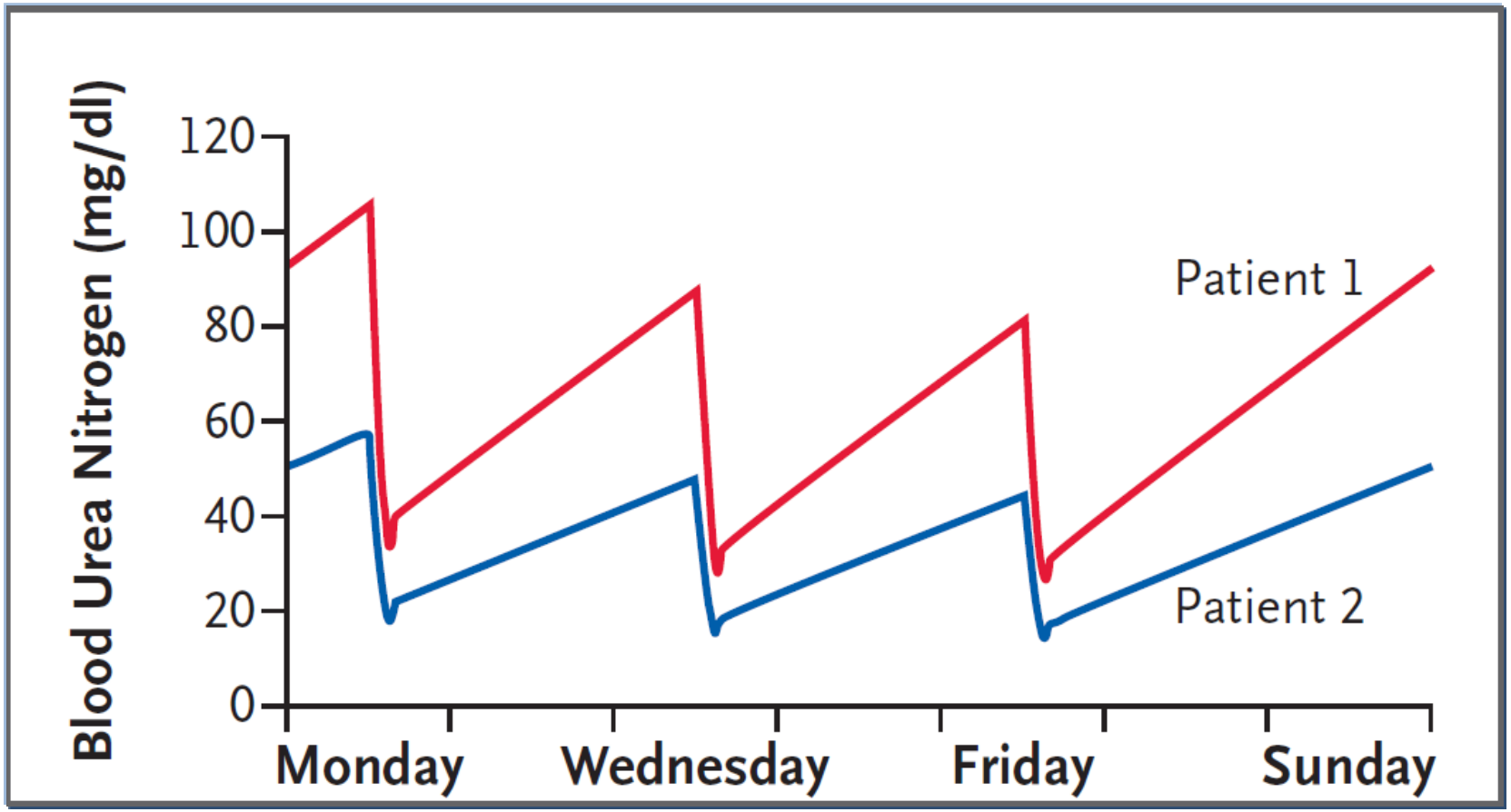
Ronald & Richard Herrick
December 23rd 1954
Boston, Massachusetts

History (1976)

N=2682

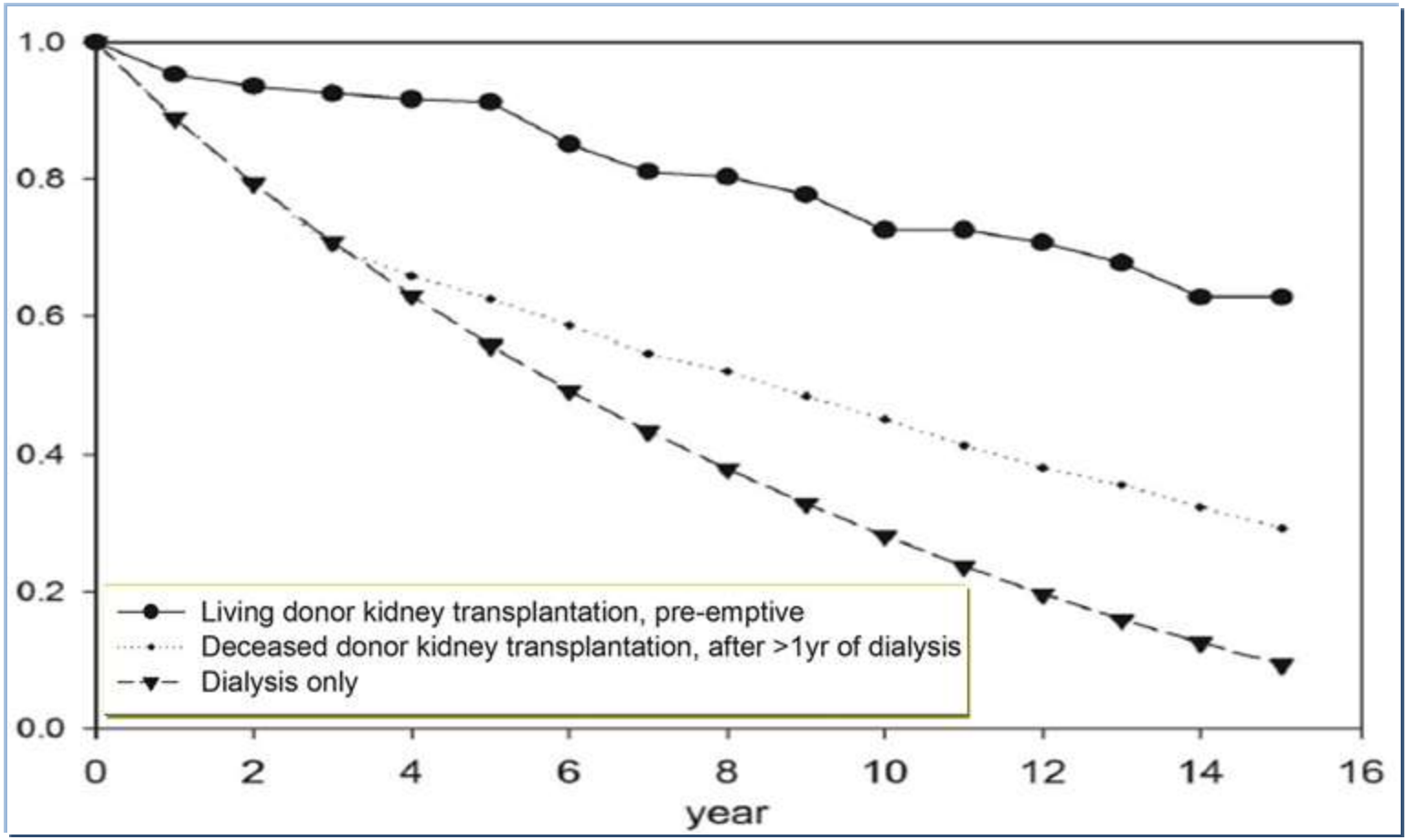
WHY ?

Hemodialysis



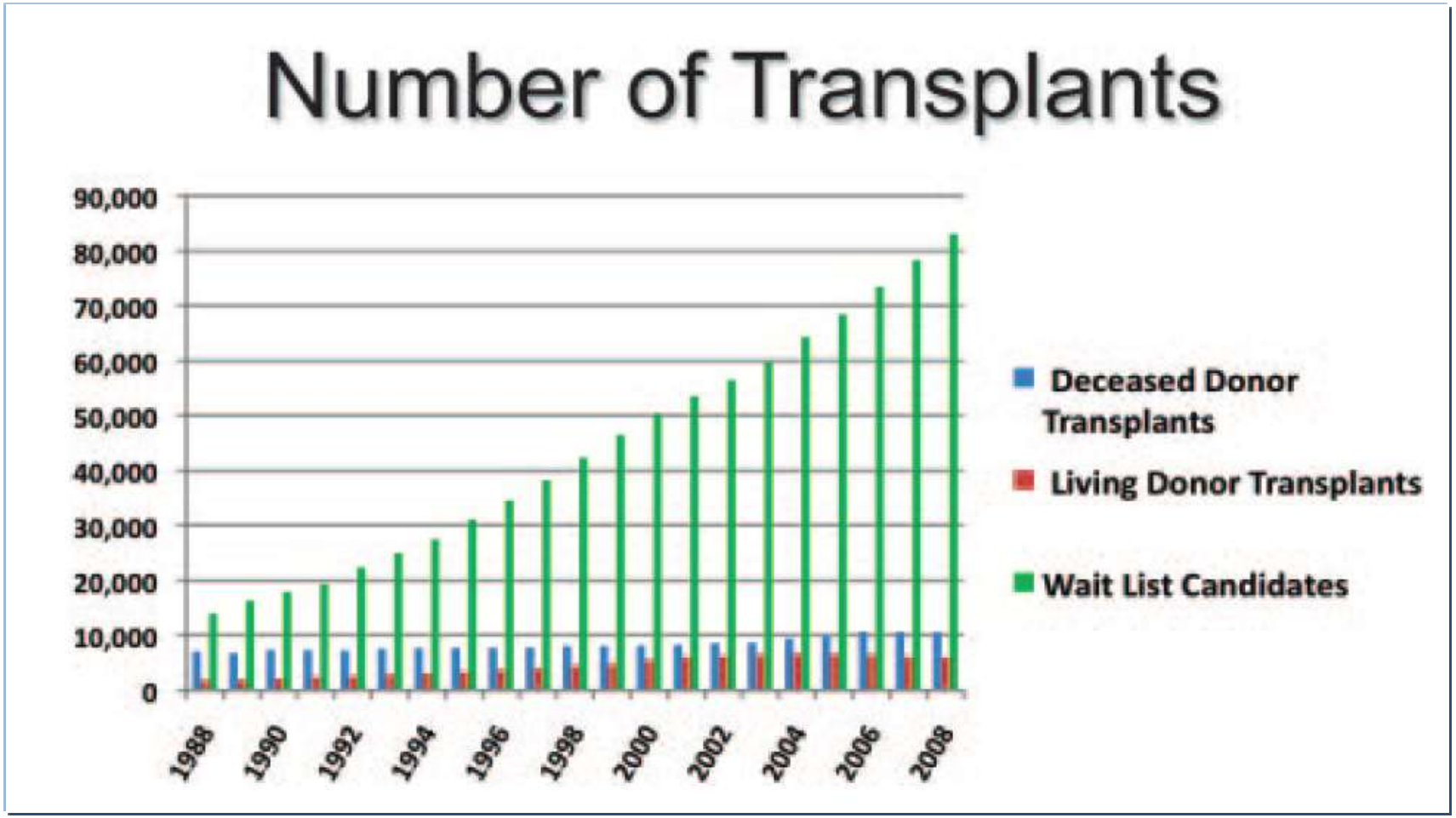
N Engl J Med 2007;357:1316-25.

Pre-emptive Transplantation: Patients' Survival



Transplantation 2009;87: 317–318

The Challenge



Clin J Am Soc Nephrol 5: 1873–1880, 2010

Prevalence of Live Kidney Donors

- **Finland: 3.3%**
- **France: 8%**
- **Belgium: 12%**
- **Germany: 21.6%**
- **UK: 47%**
- **USA: 49.5%**
- **Netherlands: 63.8%**
- **Japan: 80%**
- **Egypt and Pakistan: 100%**

Nephrol Dial Transplant (2012) 27: 41–50

Types of Live Donors

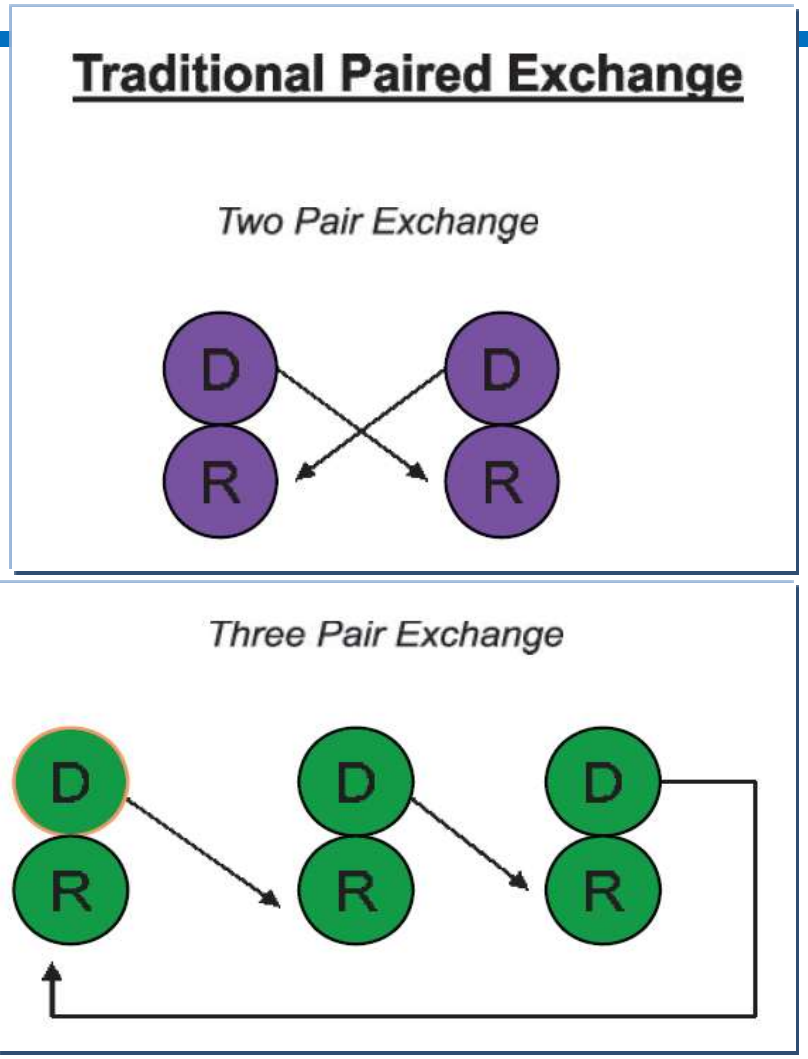
- **Directed**

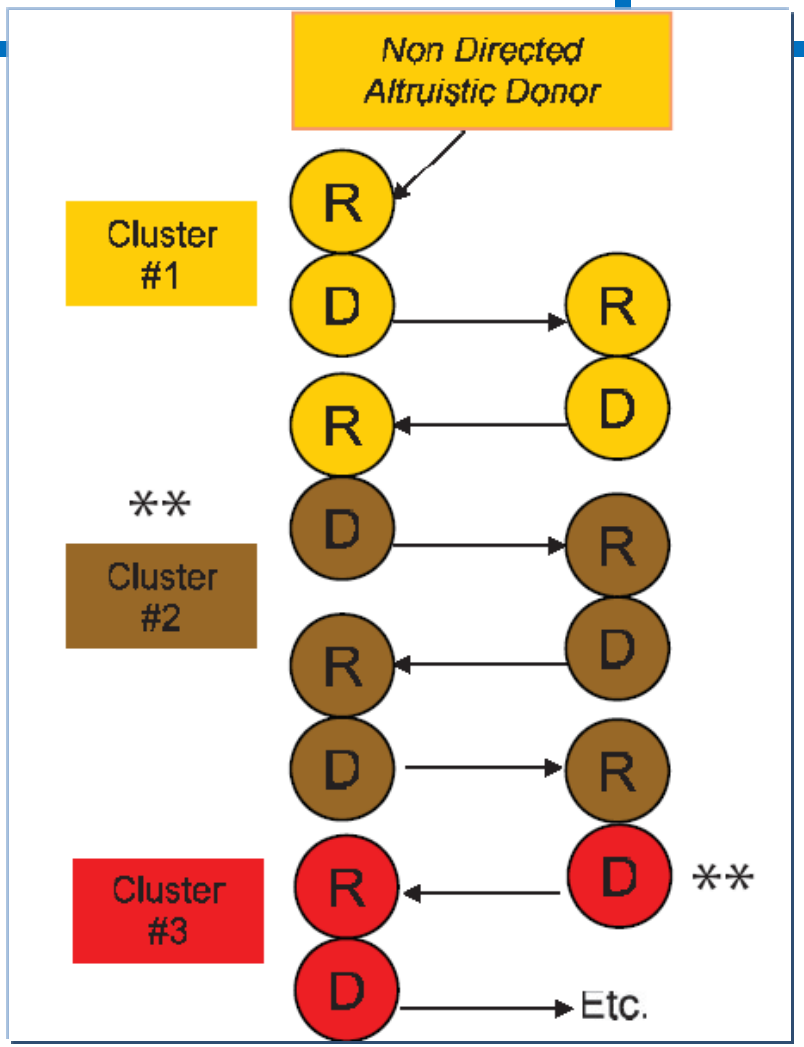
1. **Genetically Related**
2. **Emotionally Related**

- **Non- directed**

1. **Altruistic Donors**
2. **Organ Exchangers**
3. **Vendors???????**

Donor Exchange





Advantages of Live Donor Kidney Transplantation

Benefits

Allows a planned (elective) operation to be carried out by a consultant anaesthetist and consultant surgeon.

Recipient and donor psychosocially more prepared.

Kidney anatomy already known from CT/MRA. Less likely to have injury during retrieval.

Healthy kidney chosen for retrieval.

Less stress to kidney during retrieval because of avoidance of abnormal physiology of brainstem death.

Shorter cold ischemic time.

Less delayed graft function.

Better match.

Less rejection.

Long waiting time on dialysis avoided.

Pre-emptive transplantation possible.

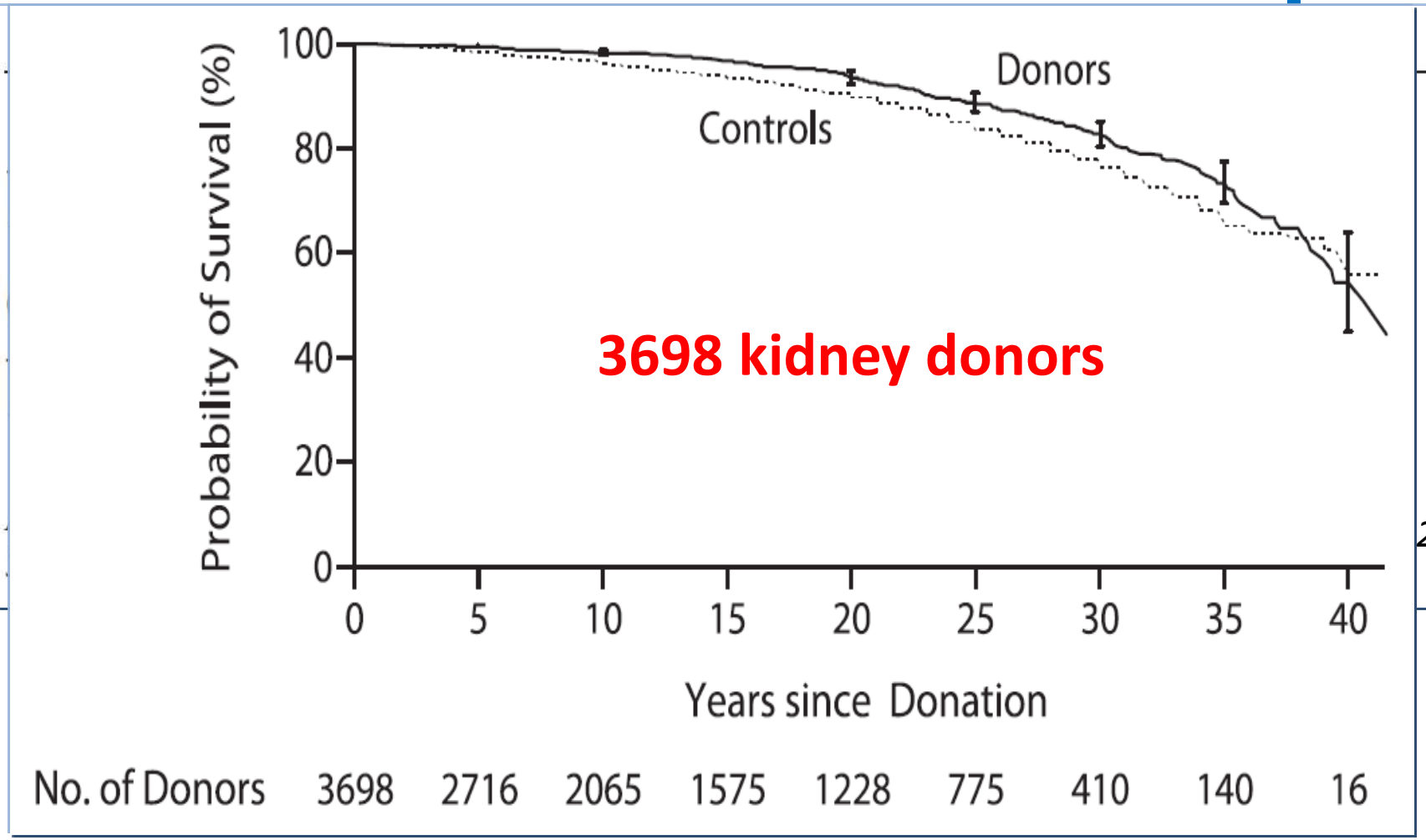
Better kidney and patient survival.

Less cost.

Allows more patients to be transplanted by increasing the donor pool.

Clin. Transplant. 2006;20(17):13–16.

The Outcome



N Engl J Med 2009;360:459-69

Outcome:

Mansoura Experience

Long-term follow-up of living kidney donors: a longitudinal study

339

Amgad E. El-Agroudy, Alaa A. Sabry, Ehab W. Wafa, Ahmed H. Neamatalla, Amani M. Ismail, Tarek Mohsen, Abd Allah Khalil, Ahmed A. Shokeir and

ARTICLE

8/2000

End-stage Renal Disease Among Living-Kidney Donors: Single-center Experience

Ehab W. Wafa,[1] Ayman F. Refaie,[1] Tarek M. Abbas,[1] Mohamed A. Fouda,[1] Hussein A. Sheashaa,[1] Amani Mostafa,[2] Mohamed I. Abo El Ghar,[3] Mohamed A. Ghoneim[4]

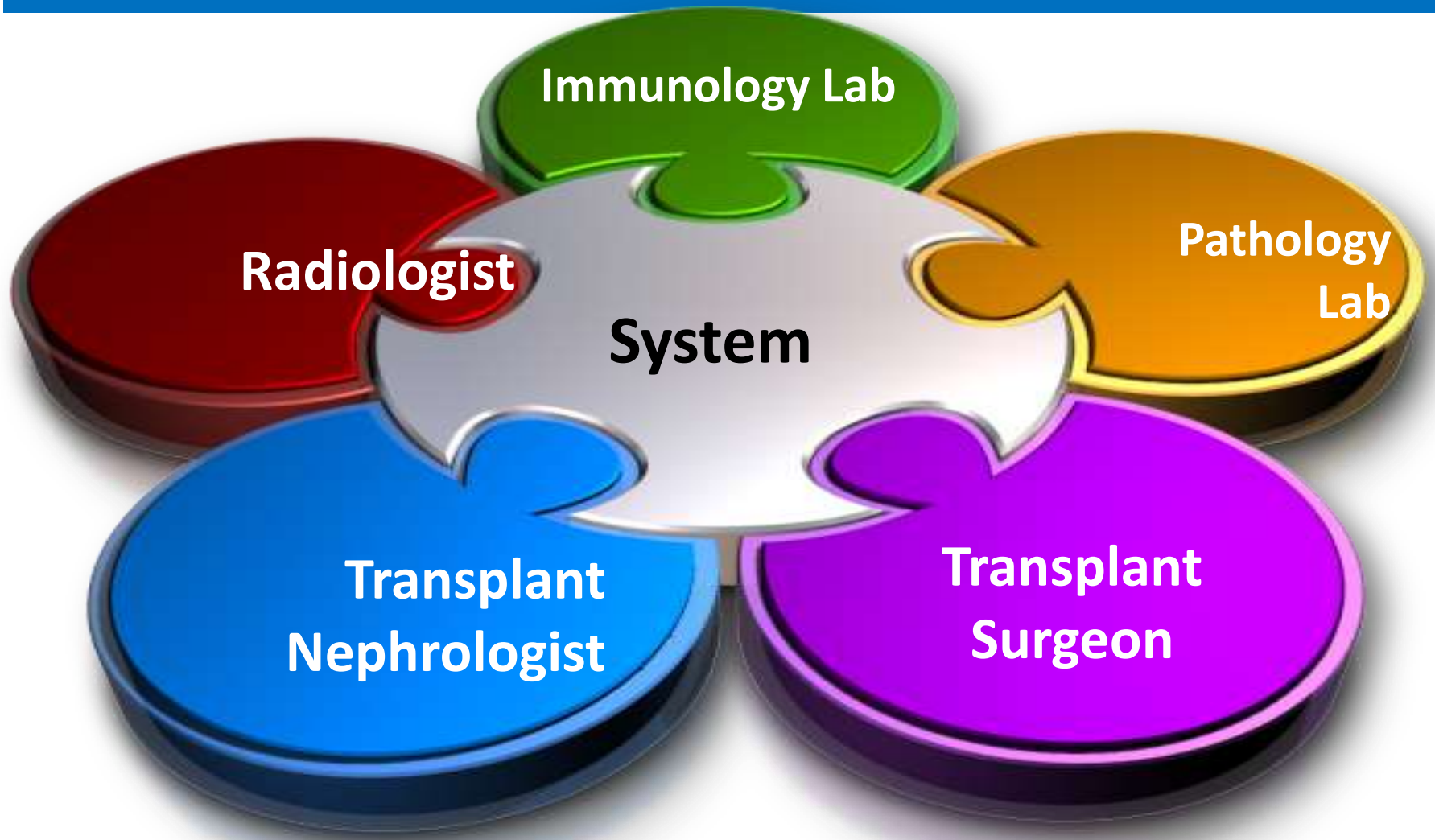
Experimental and Clinical Transplantation (2011) 1: 14-19

- **> 300 mg/24 h:** **1.5%**

Outcome

- Pregnancy---→delayed for 6m post-donation
- HTN
- CKD
- Mortality
- Work and Insurance

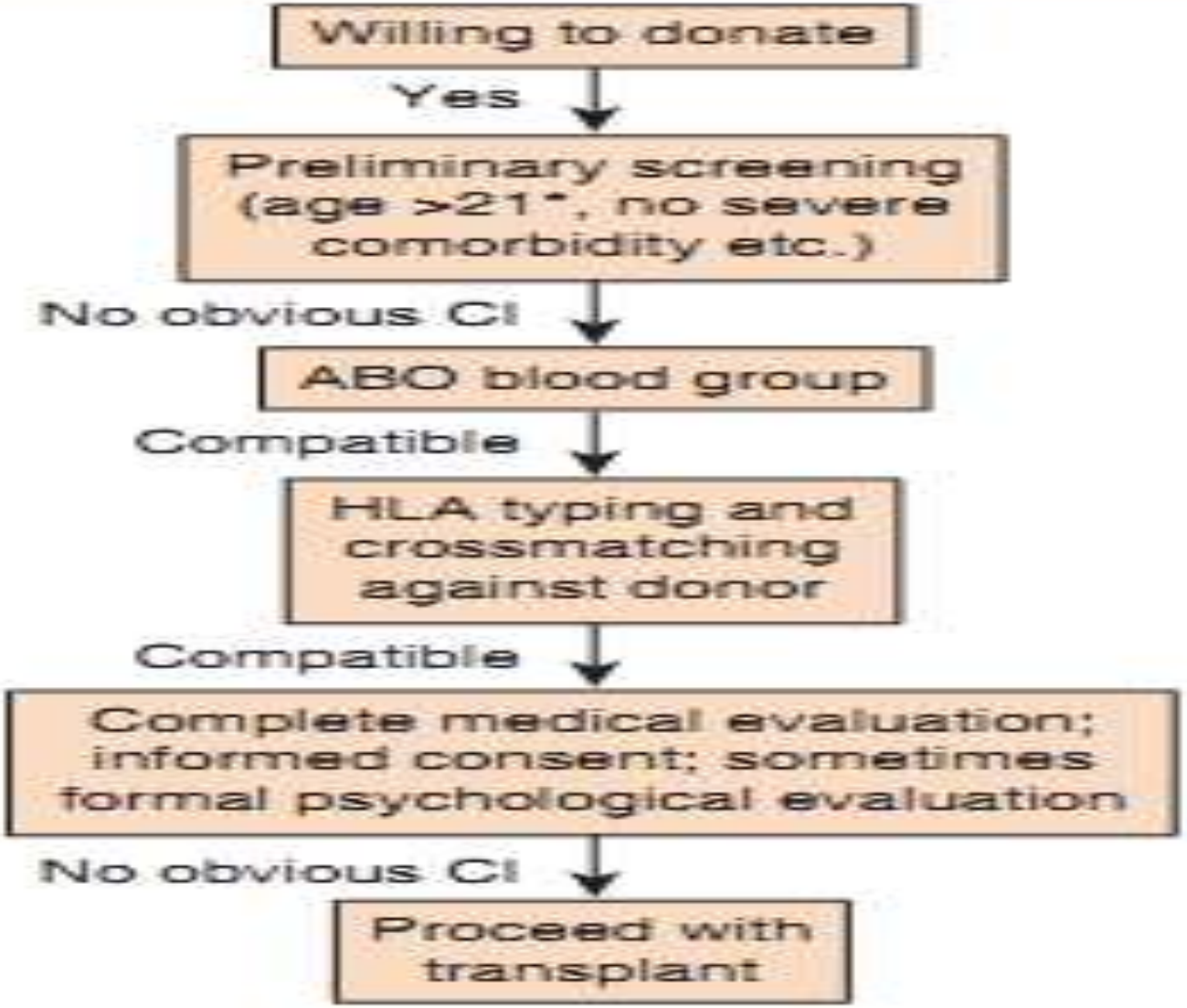
MDT


Immunology Lab
Radiologist
System
Pathology Lab
Transplant Nephrologist
Transplant Surgeon

Donor Evaluation

- **Initial (Screening) -----→ Hx., exam.**
- **Second (Immunological)**
- **Third (Fitness) -----→ Invest.**
- **Fourth (Psycho-Social)**
- **Fifth (Surgical imaging)**
- **Final re-do cross match**

STEPS


Willing to donate
Yes
Preliminary screening (age >21*, no severe comorbidity etc.)
No obvious CI
ABO blood group
Compatible
HLA typing and crossmatching against donor
Compatible
Complete medical evaluation; informed consent; sometimes formal psychological evaluation
No obvious CI
Proceed with transplant

Donor Evaluation

Living Donor Evaluation Checklist: History and Examination

History

- Hypertension
- Diabetes (including gestational)
- Infections
- Cancer (including skin lesions)
- Vascular disease
- Renal calculi
- Gout
- Urinary tract
- Family history
- Medications (including NSAIDs, herbs)
- Smoking
- Illicit and intravenous drug use
- Sexual history
- Vocation, sport interests
- Level of physical activity, exercise
- Psychiatric history, psychological factors
- Willingness to donate
- Relationship with recipient

Examination

- Blood pressure
- Weight and height, BMI
- Joints, skin
- Cancer (including skin lesions, breast)
- Lymph nodes
- Vascular disease
- Heart and lungs
- Abdomen

Living Donor Evaluation Checklist: Investigations

Laboratory and Radiologic Investigations

- Urinalysis (blood, protein)
- Urine microscopy and culture (blood, organisms)
- Serum electrolytes, urea, and creatinine
- Liver function tests
- Full blood examination
- Fasting blood glucose and/or oral glucose tolerance test
- Fasting lipids
- 24-hour urine, creatinine clearance or GFR measurement by iothalamate, Cr-EDTA, DTPA clearance, 24-hour urine protein, or protein excretion by other methods (e.g., protein-creatinine ratio)
- Serum uric acid, calcium, phosphate
- Viral screening: HBV, HCV, HIV, CMV, EBV serology
- Syphilis screening (RPR)
- TB screening (PPD)
- Electrocardiogram
- Chest radiograph
- Females: Pap smear, mammography (according to age and family history)
- Males: prostate-specific antigen (according to age and family history)
- Additional cardiac investigations (where indicated by age, history, risk factors)
- Stress test
- Echocardiography
- Ambulatory blood pressure

Renal Imaging (According to Local Expertise)

- Computed tomographic angiography
- Magnetic resonance imaging angiography
- Catheter angiography

TABLE 33-5 Relative or Absolute Contraindications to Live Kidney Donation
Age <18-25 or >70-75 years
Hypertension (BP >140/90 or on antihypertensive medication)
BMI >30-35 kg/m^2
Diabetes mellitus or abnormal glucose tolerance test
History of gestational diabetes mellitus
Malignancy
Significant comorbidity
Microalbuminuria or proteinuria
Recurrent kidney stone disease
Other kidney disease
Low GFR (<70-80 ml/min 1.73 m^2)
Transmissable serious infection (e.g., HIV, hepatitis B, hepatitis C)

Amsterdam forum guidelines

Table 1 | Amsterdam forum guidelines

Acceptable donor renal function

All potential kidney donors should have GFR estimated.

Creatinine-based methods may be used to estimate the GFR; however, creatinine clearance (as calculated from 24-h urine collections) may under or overestimate GFR in patients with normal or near normal renal function.

Calculated GFR values (MDRD and Cockcroft-Gault) are not standardized in this population and may overestimate GFR.

A GFR < 80 ml/min or 2 s.d. below normal (based on age, gender, and BSA corrected to 1.73 per m^2) generally preclude donation.

Hypertension

Patients with a BP > 140/90 by ABPM are generally not acceptable as donors.

BP should preferably be measured by ABPM, particularly among older donors (> 50 years) and/or those with high office BP reading.

Some patients with easily controlled hypertension, who meet other defined criteria, e.g. > 50 years of age, GFR > 80 ml/min, and urinary albumin excretion < 30 mg/day may represent a low-risk group for development of kidney disease after donation and may be acceptable as kidney donors.

Donors with hypertension should be regularly followed by a physician.

Obesity

Patients with a BMI > 35 kg/m^2 should be discouraged from donating, especially when other comorbid conditions are present.

Obese patients should be encouraged to lose weight before kidney donation and should be advised not to donate if they have other associated comorbid conditions.

Obese patients should be informed of both acute and long-term risks, especially when other comorbid conditions are present.

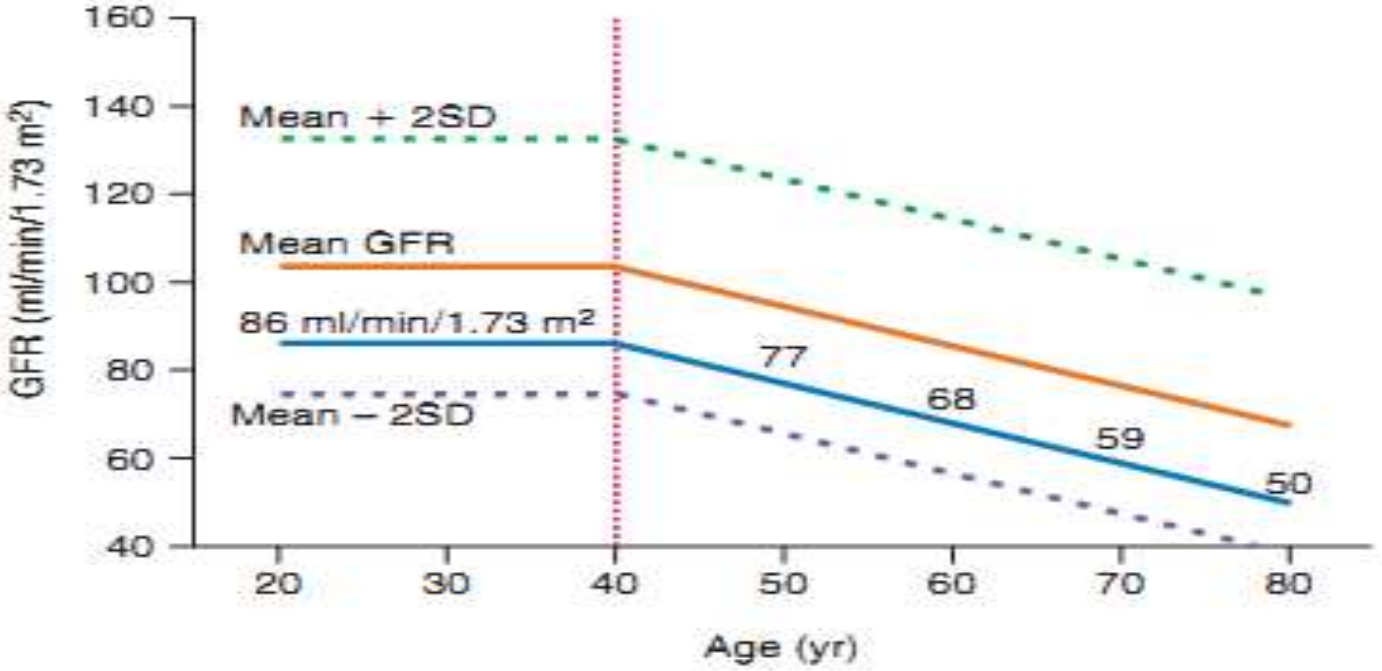
Healthy lifestyle education should be available to all living donors.

Dyslipidemia

Dyslipidemia should be included along with other risk factors in donor risk assessment, but dyslipidemia alone does not exclude kidney donation.

Kidney International (2007) 71, 606–614

Acceptable GFR in Living Donors by Age



COMPREHENSIVE CLINICAL NEPHROLOGY , 2015

Amsterdam forum guidelines

Malignancy

A prior history of the following malignancies usually excludes live kidney donation:

Melanoma, testicular cancer, renal cell carcinoma, choriocarcinoma, hematological malignancy, bronchial cancer, breast cancer, and monoclonal gammopathy.

A prior history of malignancy may only be acceptable for donation if:

Prior treatment of the malignancy does not decrease renal reserve or place the donor at increased risk for ESRD.

Prior treatment of malignancy does not increase the operative risk of nephrectomy.

A prior history of malignancy usually excludes live kidney donation but may be acceptable if.

The specific cancer is curable and potential transmission of cancer can reasonably be excluded.

Urinary tract infections

The donor urine should be sterile before donation; asymptomatic bacteruria should be treated pre donation.

Pyuria and hematuria at the proposed time of donation is a contraindication to donation.

Unexplained hematuria or pyuria necessitates evaluation for adenovirus, tuberculosis, and cancer. Urinary tuberculosis or cancer are contraindications to donation.

Kidney International (2007) **71**, 606–614

Amsterdam forum guidelines

Urine analysis for protein

A 24 h urine protein of >300 mg is a contraindication to donation.

Microalbuminuria determination may be a more reliable marker of renal disease but its value as an international standard of evaluation for kidney donors has not been determined.

Urine analysis for blood

Patients with persistent microscopic hematuria should not be considered for kidney donation unless urine cytology and a complete urologic work up are performed. If urological malignancy and stone disease are excluded, a kidney biopsy may be indicated to rule out glomerular pathology such as IgA nephropathy.

Diabetes

Individuals with a history of diabetes or fasting blood glucose ⩾126 mg/dl (7.0 mmol/l) on at least two occasions (or 2 h glucose with OGTT ⩾200 mg/dl (11.1 mmol/l) should not donate.

Stone disease

An asymptomatic potential donor with history of a single stone may be suitable for kidney donation if:

No hypercalcuria, hyperuricemia, or metabolic acidosis.

No cystinuria or hyperoxaluria.

No urinary tract infection.

If multiple stones or nephrocalcinosis are not evident on CT.

An asymptomatic potential donor with a current single stone may be suitable if:

The donor meets the criteria shown previously for single stone formers and current stone <1.5 cm in size, or potentially removable during the transplant.

Stone formers who should not donate are those with:

(a) Nephrocalcinosis on *X* ray or bilateral stone disease and

(b) Stone types with high recurrence rates, and are difficult to prevent (see text).

Kidney International (2007) **71**, 606–614

Amsterdam forum guidelines

Acceptable donor renal function
Live unrelated donors

The current available data suggest no restriction of live kidney donation based upon the absence of an HLA match. An unrelated donor transplant is equally successful to the outcome achieved by a genetically related family member such as a parent, child, or sibling, who is not HLA identical to the recipient.

Determination of cardiovascular risk

The clinical predictors of an increased perioperative cardiovascular risk (for non-cardiac surgery) by the American College of Cardiology /American Hospital Association standards fall into three categories: major, intermediate, and minor.

All major predictors: unstable coronary syndromes, decompensated heart failure, significant arrhythmias and severe valvular disease are contraindications to live kidney donation. Most of the intermediate predictors: mild angina, previous myocardial infarction, compensated or prior heart failure, and diabetes mellitus are also contraindications to donation. Minor predictors: older age, abnormal ECG, rhythm other than sinus, low cardiac functional capacity, history of stroke, or uncontrolled hypertension warrant individual consideration.

Assessment of pulmonary issues

A careful history and physical examination are the most important parts of assessing risk. Routine preoperative PFT is not warranted for potential live kidney donors unless there is an associated risk factor such as chronic lung disease. Increased risk of post operative pulmonary complication is assoc with an FEV1 $<$ 70% or FVC $<$ 70% of predicted, or a ratio of FEV1/FVC $<$ 65%.

Smoking cessation and alcohol abstinence

Smoking cessation at least 4 weeks before donation is advised based on recommendations for patients undergoing elective surgical procedures.

Cessation of alcohol abuse defined by DSM-3: 60 gm of alcohol/day sustained over $\geqslant$ 6 months should be avoided for a minimum of 4 weeks to decrease the known risk of postoperative morbidity.

Kidney International (2007) **71**, 606–614

Donor evaluation

- **Social survey :**

- **Very crucial**
- **Especially in underdeveloped countries**
- **Specialized social workers**
- **Commercial related donation**
- **Female discrimination (Younger sisters)**

Components of the psychosocial evaluation of living kidney donors

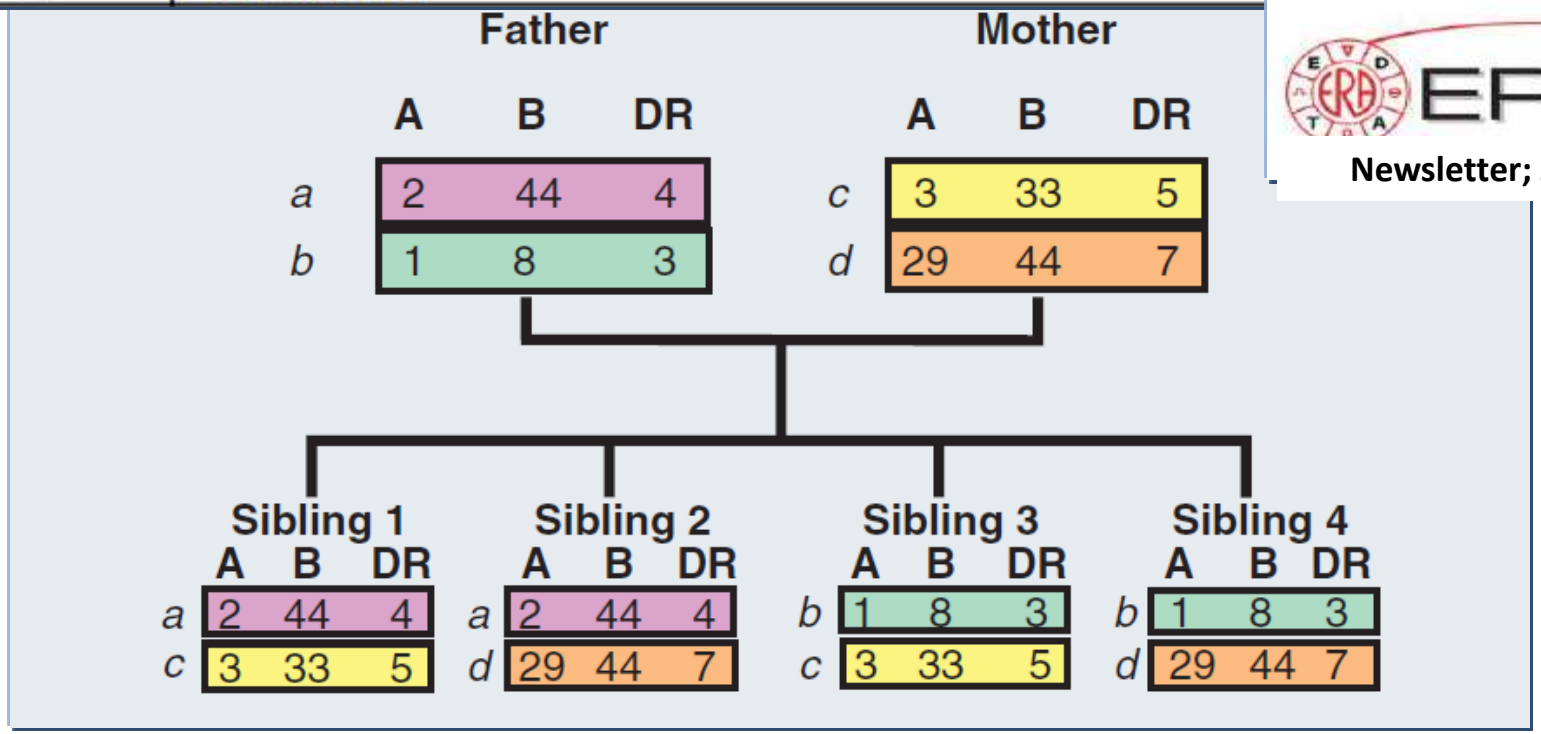
Component	Description of content
Sociodemographic history and current status	Educational attainment, living situation, religious beliefs and practices, marital status, and employment.
Capacity	Cognitive status and capacity to comprehend information; risk for exploitation by others for monetary or other personal gain.
Psychological status	Presence of current and past psychiatric disorder, including mood, anxiety, substance use, personality or other serious disorders. Current and past use of therapeutic interventions (counseling and medications) for psychological or other stressors including sexual abuse, or for chronic pain management. Nature of coping skills to manage current or past life or health-related stressors.
Relationship with transplant candidate	Nature and degree of relationship (if any) to transplant candidate; whether donation would impose expectations or perceived obligations.
Motivation	Rationale and reasons for volunteering to donate; perceived coercion or undue pressure by others to donate.
Knowledge, understanding, and preparing for donation	Awareness of short- and long-term risks for surgical complications and health outcomes; understanding of recovery and recuperation time; availability of alternative treatments for the transplant candidate.
Social supports	Spouse or other significant family members' support for proceeding with donation; support from other sources (friends and employer).
Financial status and suitability	Financial stability and freedom from current or expected financial hardship; availability of resources to cover expected and unexpected donation-related expenses; availability of disability and health insurance.

Kidney International (2007) **71**, 606–614

Immunological assessment

HLA Matching

2-2,3	We recommend to give preferenec to an HLA identical donor and recipient combination (1B)
2-2,4	We suggest to give more weight to HLA-DR matching than to HLA-A and B matching (2c)



ERBP

Newsletter; 2 March 2013

Comprehensive textbook of Nephrology 2010

Blood Grouping

Recipient	Donor
A	
B	
AB	

Impact of Rh(D) Blood Group System on Graft Function and Survival in Live-Donor Kidney Transplantation: A Single-Institution Experience

Yasser Osman, Amr El-Husseini, Hussein Sheashaa, Moustafa Amani, Mohamed A. Bakr, and Ahmed B. Shehab El-Din

Transplantation 2004;78: 1693–1696)

Donor evaluation

- **Surgical Imaging survey components :**

  - Imaging of the renal vasculature

  - Imaging of pelvi-calyceal system

  - Split renal function (renogram)

Donor evaluation

- **Surgical Imaging aims :**

- To choose the kidney with

single artery

more lengthy artery

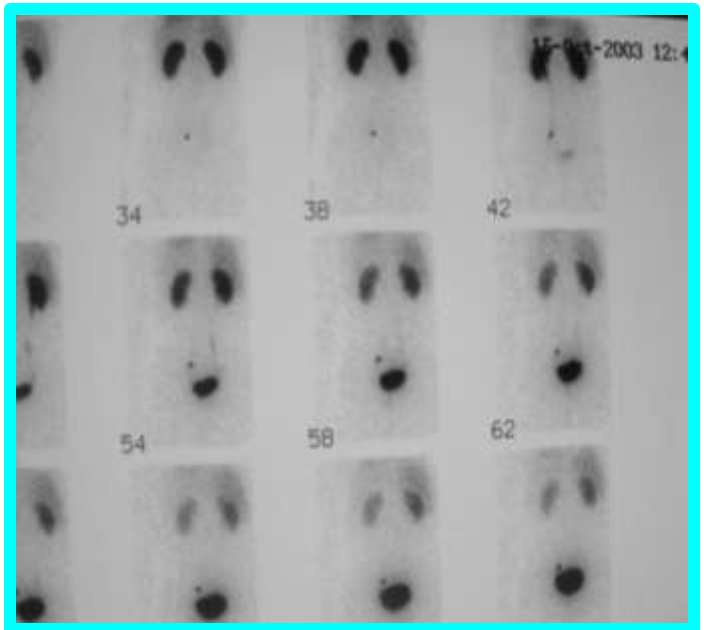
absent pelvi-calyceal anomalies

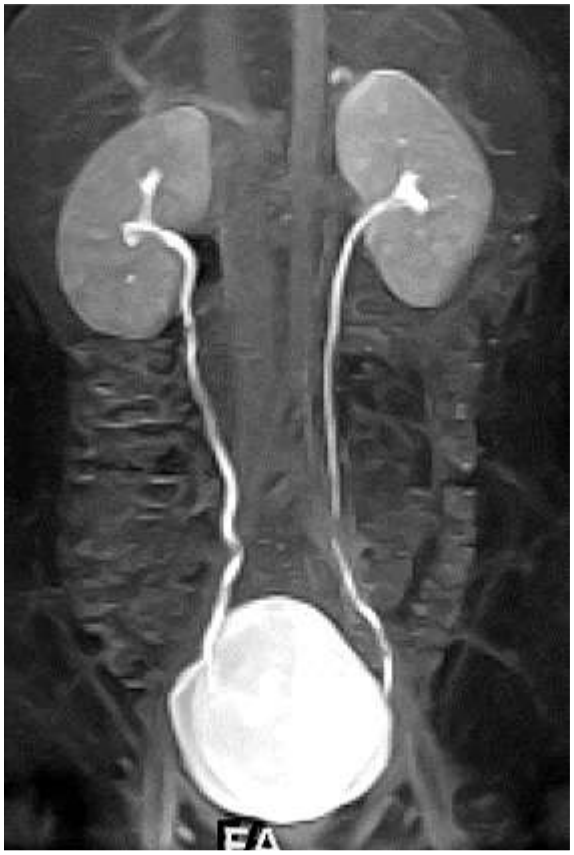
lower split function

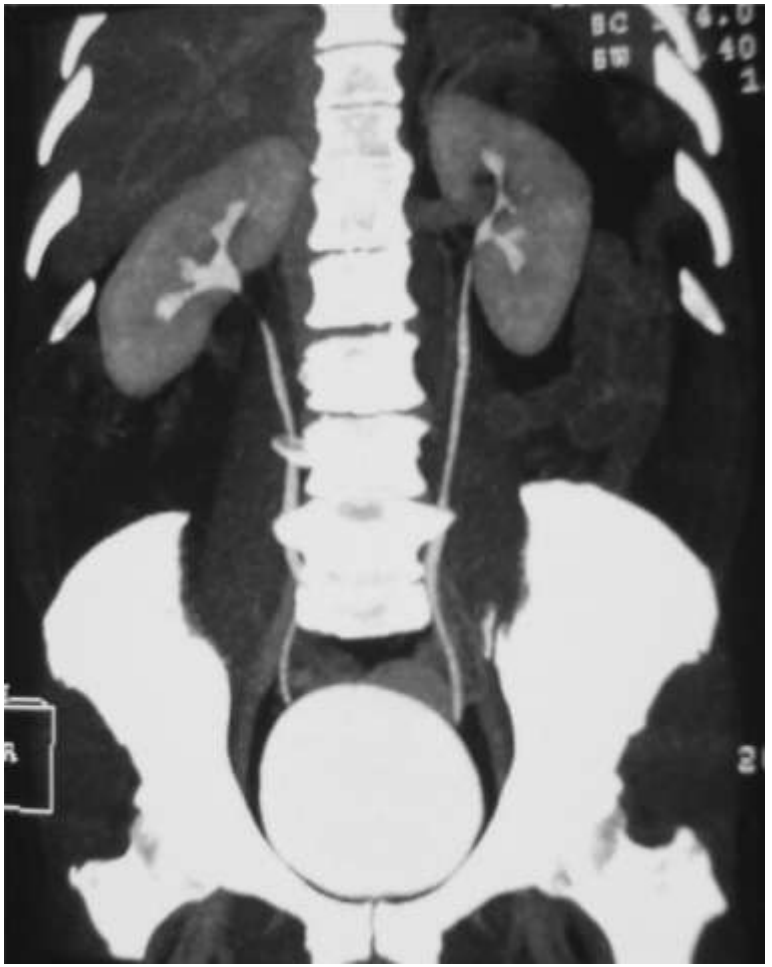
Techniques

- Past: UTP, IVU, Aortography
- Now:

1. MRA, MRV, MRU
2. CTA, CTV, CTU
3. Renogram







0022-5347/04/1711-0031/0
THE JOURNAL OF UROLOGY®

Vol. 171, 31–34, January 2004
Printed in U.S.A.
DOI: 10.1097/01.ju.0000099784.52825.8e

CONTRAST ENHANCED SPIRAL COMPUTERIZED TOMOGRAPHY IN LIVE KIDNEY DONORS: A SINGLE SESSION FOR ANATOMICAL AND FUNCTIONAL ASSESSMENT

TAREK A. EL-DIASTY, AHMED A. SHOKEIR,* MOHAMED E. ABO EL-GHAR, HOSSAM M. GAD, AYMAN F. REFAIE AND AHMED B. SHEHAB EL-DIN

From the Urology and Nephrology Center, Mansoura University, Mansoura, Egypt

Magnetic resonance imaging as a sole method for the morphological and functional evaluation of live kidney donors

TAREK A. EL–DIASTY, MOHAMED E. ABO EL–GHAR, AHMED A. SHOKEIR, HOSSAM M. GAD, EHAB W. WAFA, MOHAMED E. EL–AZAB, AHMED B. SHEHAB EL–DIN and MOHAMED A. GHONEIM
Urology & Nephrology Center, Mansoura University, Mansoura, Egypt

Accepted for publication 31 January 2005

Donor Nephrectomy Techniques

TABLE 33-3 Advantages and Disadvantages of Laparoscopic Nephrectomy for Living Donors
ADVANTAGES
Less invasive surgery; postoperative recovery faster
Smaller scar
Shorter hospital stay
More acceptable to many donors
DISADVANTAGES
Long-term outcomes not available
Learning curve
Potential for more perioperative ischemic damage and delayed graft function

Am J Surg. 2015 Oct 20. pii: S0002-9610(15)00538-3. doi: 10.1016/j.amjsurg.2015.08.019. [Epub ahead of print]

Robotic nephrectomy for living donation: surgical technique and literature systematic review.

Giacomoni A[1], Di Sandro S[2], Lauterio A[1], Concone G[3], Buscemi V[3], Rossetti O[1], De Carlis L[1].

Author information

Abstract

BACKGROUND: As compared with traditional laparoscopy, robotic-assisted surgery provides better EndoWrist instruments and three-dimensional visualization of the operative field. Studies published so far indicate that living donor nephrectomy using the robot-assisted technique is safe, feasible, and provides remarkable advantages for the patients.

METHODS: From 5 papers reporting detailed descriptions of surgical technique for robotic assisted nephrectomy (RAN) in living donor kidney transplantation, we have gathered information about the surgical techniques as well as about patients' intra- and postoperative outcome. Data from these articles were analyzed together with the data from our own experience (33 cases) so that the total number of analyzed cases was 292.

RESULTS: In the analyzed populations, no case of donor death occurred, and no case developed complication above grade 2 of Clavien score. Perioperative complications occurred in 37 of the 292 patients (12.6%). Accidental acute hemorrhage occurred in 5 of the 292 cases (1.7%). The average overall intraoperative blood loss was 67.8 mL (range 10 to 1,500). The average warm ischemia time was 3.5 minutes (range .58 to 7.6). Conversion to the open technique occurred in only 4 cases (1.3%). The average overall operative time was 192 minutes (range 60 to 400). The average length of the hospital stay was 2.7 days (range 1 to 10).

CONCLUSIONS: Safety and feasibility of RAN are pointed out in all the reviewed article, both as hand-assisted and as totally robotic technique. RAN appears to be significantly easier for the surgeons and the results are comparable with the ones obtained with the pure laparoscopic technique.

Donor Special Issues

Race and Gender

American Journal of Transplantation 2011; 11: 1650–1655
Wiley Periodicals Inc.

doi: 10.1111/j.1600-6143.2011.03609.x

Ethnic and Gender Related Differences in the Risk of End-Stage Renal Disease After Living Kidney Donation

Postdonation ESRD rate per 1000 years at risk all living kidney donors who donated during April 1, 1994–March 31, 2003

		No. of Living Kidney Donors	Total Years at Risk	Number With Postdonation ESRD	ESRD Rate Per 1,000 Years at Risk	Relative Risk of ESRD [95% CL]
Donor Ethnicity	White	29 530	290 629.4	25	0.086	1.00
	Black	5531	54 394.8	23	0.423	4.92 [2.79–8.66]
	All	41 753	410 481.0	55	0.134	
Donor Gender	Female	24 177	237 803.3	21	0.088	1.00
	Male	17 576	172 677.7	34	0.197	2.24 [1.30,3.86]
	All	41 753	410 481.0	55	0.134	

BMC Nephrol. 2015 Oct 9;16(1):160. doi: 10.1186/s12882-015-0153-y.

The TALKS study to improve communication, logistical, and financial barriers to live donor kidney transplantation in African Americans: protocol of a randomized clinical trial.

Strigo TS[1], Ephraim PL[2], Pounds I[3], Hill-Briggs F[4], Darrell L[5], Ellis M[6], Sudan D[7], Rabb H[8], Segev D[9], Wang NY[10], Kaiser M[11], Falkovic M[12], Lebov JF[13], Boulware LE[14].

⊕ Author information

Abstract

BACKGROUND: Live donor kidney transplantation (LDKT), an optimal therapy for many patients with end-stage kidney disease, is underutilized, particularly by African Americans. Potential recipient difficulties initiating and sustaining conversations about LDKT, identifying willing and medically eligible donors, and potential donors' logistical and financial hurdles have been cited as potential contributors to race disparities in LDKT. Few interventions specifically targeting these factors have been tested.

METHODS/DESIGN: We report the protocol of the Talking about Living Kidney Donation Support (TALKS) study, a study designed to evaluate the effectiveness of behavioral, educational and financial assistance interventions to improve access to LDKT among African Americans on the deceased donor kidney transplant recipient waiting list. We adapted a previously tested educational and social worker intervention shown to improve consideration and pursuit of LDKT among patients and their family members for its use among patients on the kidney transplant waiting list. We also developed a financial assistance intervention to help potential donors overcome logistical and financial challenges they might face during the pursuit of live kidney donation. We will evaluate the effectiveness of these interventions by conducting a randomized controlled trial in which patients on the deceased donor waiting list receive 1) usual care while on the transplant waiting list, 2) the educational and social worker intervention, or 3) the educational and social worker intervention plus the option of participating in the financial assistance program. The primary outcome of the randomized controlled trial will measure potential recipients' live kidney donor activation (a composite rate of live donor inquiries, completed new live donor evaluations, or live kidney donation) at 1 year.

DISCUSSION: The TALKS study will rigorously assess the effectiveness of promising interventions to reduce race disparities in LDKT.

TRIAL REGISTRATION: NCT02369354 .

Incidentlomas

Title: Living Kidney Donors with Adrenal Incidentalomas: are They Appropriate Donors

Conclusions: Here, we presented our algorithm to manage the living kidney donors with AIs. Although donor population with AIs was relatively small in number, simultaneous adrenalectomy and ipsilateral nephrectomy seemed to be technically safe and conferred no identifiable increased risk of malignancy for the kidney transplant donor, when the incidentaloma is nonfunctional and less than or equal to 4 cm as assessed by preoperative imaging.

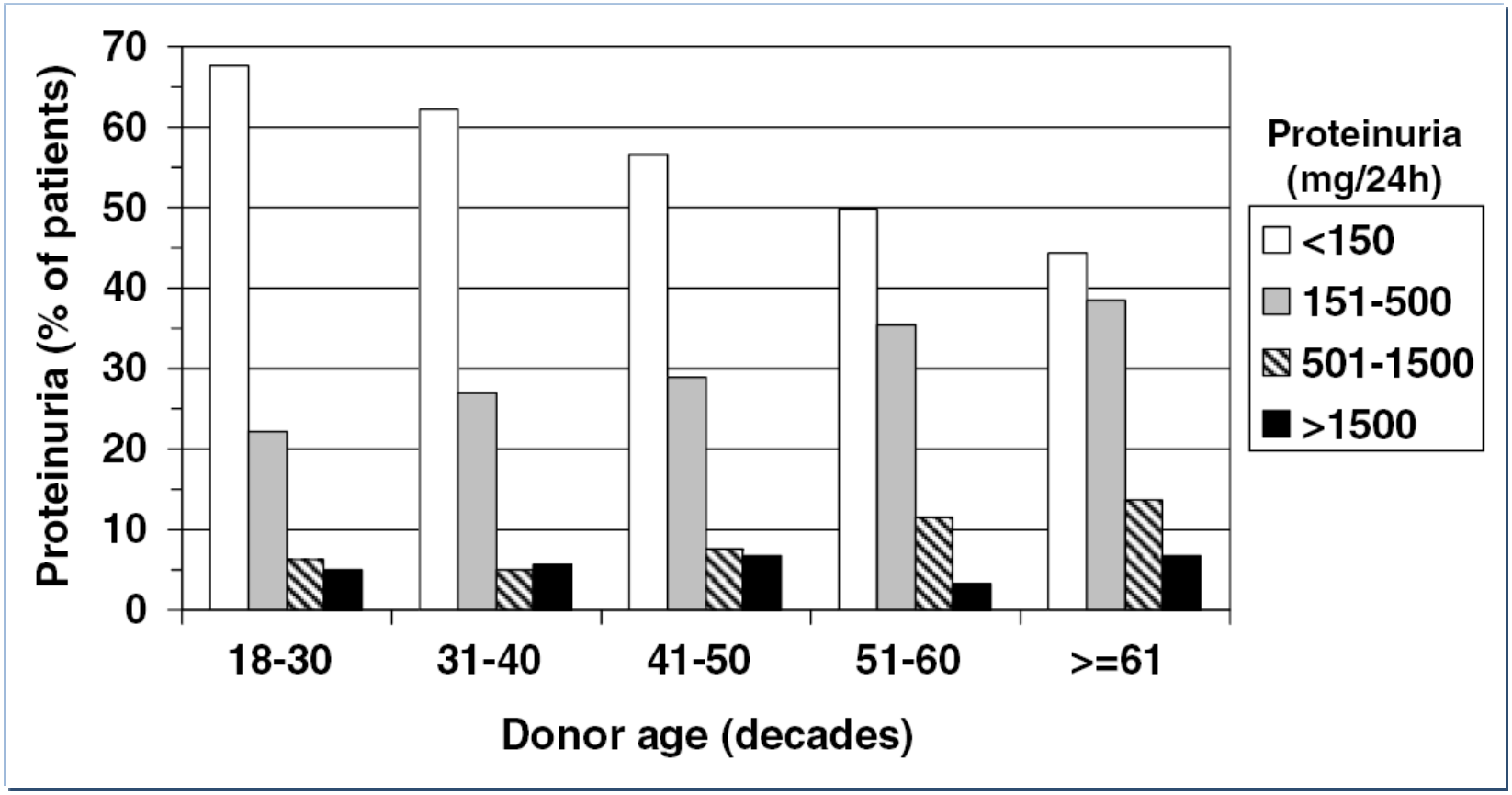
Old Age Donors

Table 2. **Prevalence of Nephrosclerosis, by Age Group***

Age Group	Crude Prevalence (95% CI), %	Crude Prevalence After Exclusion of Persons Who Received Therapy for Hypertension (95% CI), %
18–29 y	2.7 (1.1–6.7)	2.7 (1.1–6.7)
30–39 y	16 (12–20)	15 (12–20)
40–49 y	28 (24–32)	26 (22–31)
50–59 y	44 (38–50)	42 (36–49)
60–69 y	58 (47–67)	55 (44–66)
70–77 y	73 (43–90)	75 (41–93)
Overall	28 (25–30)	26 (24–29)

* Among 1203 living kidney donors at Mayo Clinic.

Impact Of Donor Old Age On Renal Transplant Outcome



American Journal of Transplantation 2011; 11: 1279–1286

Hematuria

Nephron. 1993;65(2):190-5.

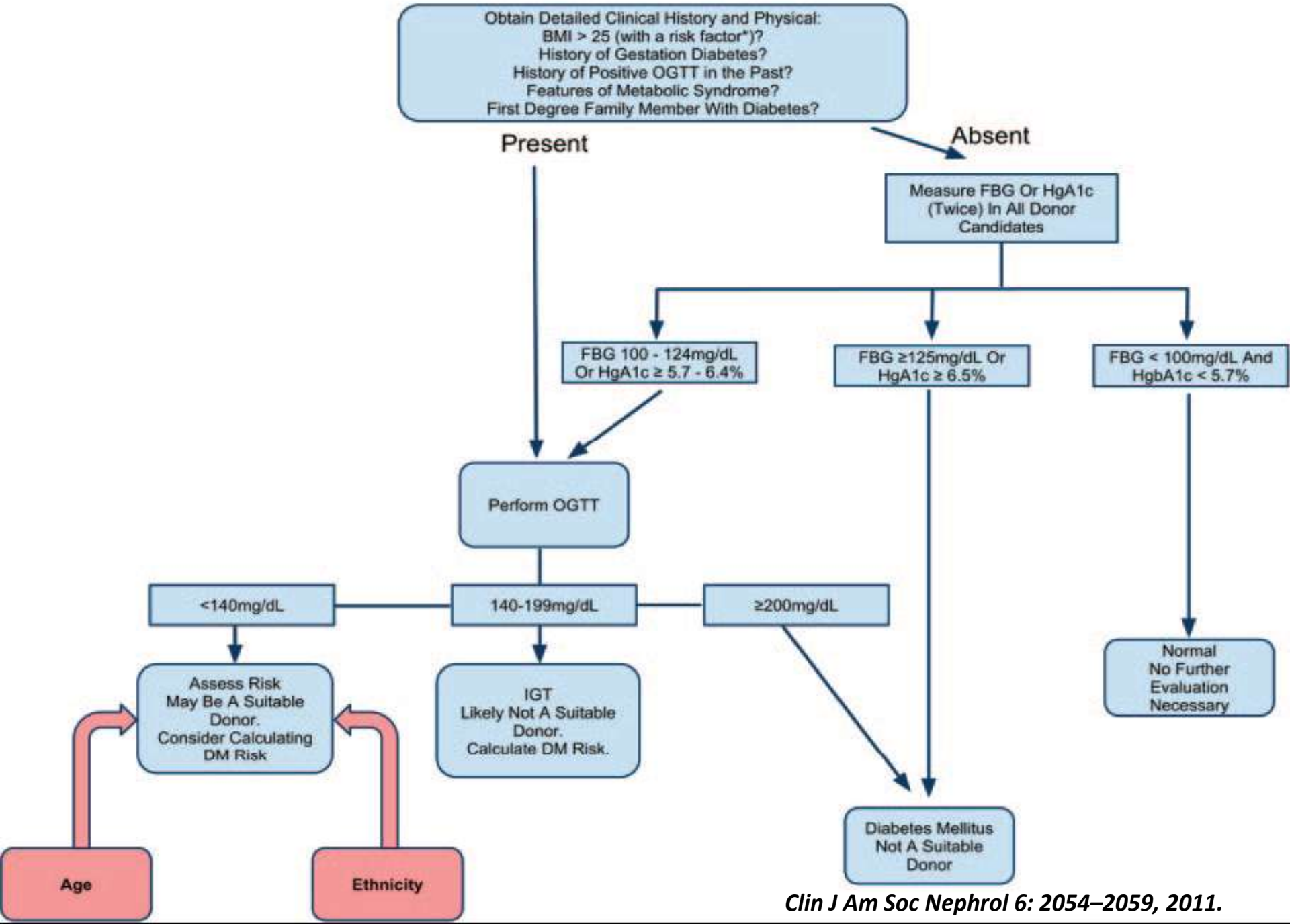
Study of asymptomatic microscopic hematuria in potential living related kidney donors.

Sobh MA, Moustafa FE, el-Din Saleh MA, Tawfik A, Ghoneim MA.
Urology and Nephrology Center, Mansoura University, Egypt.

30

- **Hereditary nephritis: 25/30**
- **Isolated C3 deposited disease: 3/30**
- **IgA nephropathy: 1/30**
- **IgM nephropathy: 1/30**

Donor Assessment Of Risk for Diabetes Mellitus



Clin J Am Soc Nephrol 6: 2054–2059, 2011.

Hyperechogenicity

RENAL TRANSPLANTATION

ORIGINAL ARTICLE

Hyperechogenic renal parenchyma in potential live related kidney donors: Does it justify exclusion?

Mohamed A. Fouda *, Ahmed A. Shokeir, Ehab W. Wafa, Ayman F. Refaie, Tarek El Diasty, Mona Abdelrahim, Mohamed A. Sobh, Mohamed A. Ghoneim

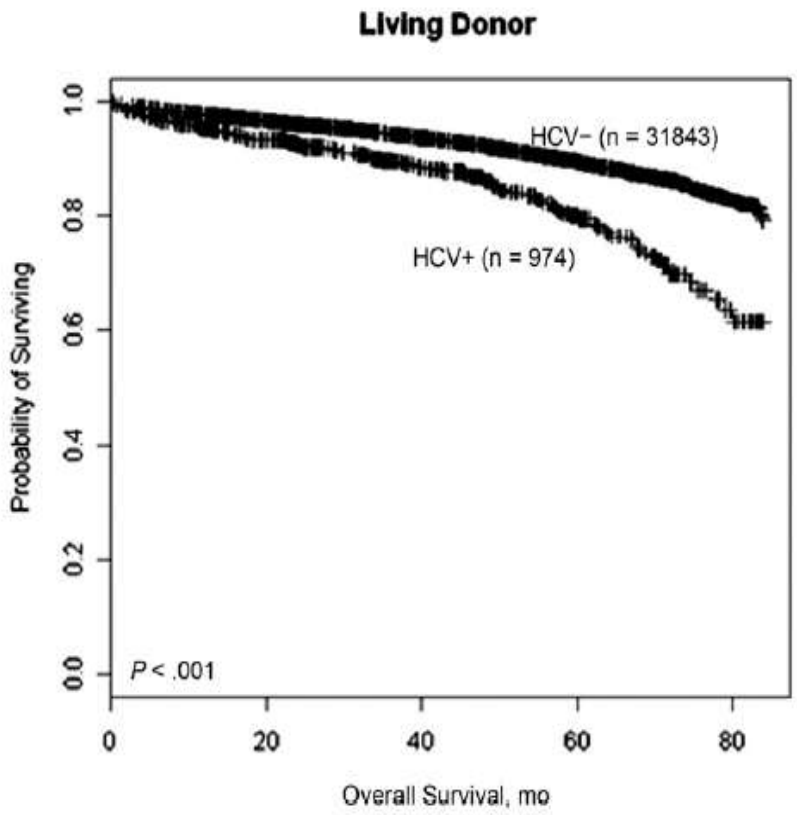
Urology and Nephrology Centre, Mansoura University, Mansoura, Egypt

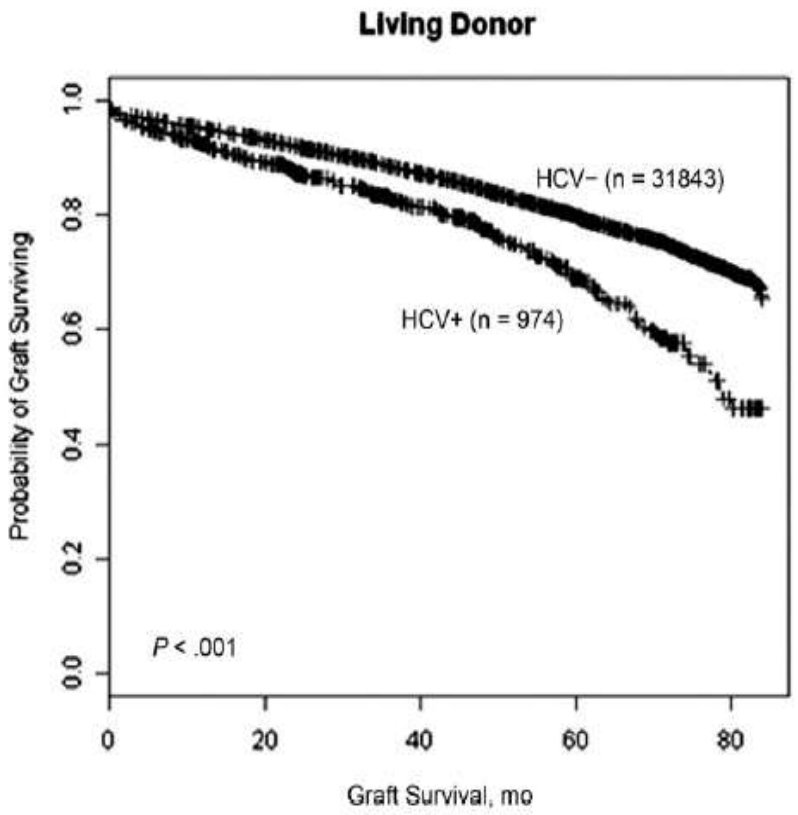
Results: The renal reserve was comparable in both groups. Abnormal histopathological changes were found in seven subjects (41%) of the abnormal echogenicity group, i.e. partial glomerulosclerosis in one, mesangial thickening in two, interstitial fibrosis in one, focal tubular atrophy in one, immunoglobulin (Ig M) immune deposits in three and IgA in one. Only one subject in the control group showed mild mesangial thickening.

Conclusion: Grade I echogenicity might be a sign of unrecognized kidney disease. Renal biopsy is mandatory when such related donors are the only available ones. Abnormal histopathology contraindicates donation.

Arab Journal of Urology, 9: 235-239, Dec 2011

HCV





Transplantation Proceedings, 42, 2436–2446 (2010)

Schistosomiasis

Scand J Urol Nephrol. 1992;26(4):409-12.

Effects of schistosomiasis on living kidney donors.

Sobh MA, el Sharkawy SE, Shokeir AA, Moustafa FE, el Sherif AK, Ghoneim MA.

Urology and Nephrology Center, University of Mansoura, Egypt.

Uncomplicated schistosomiasis in living kidney donors does not adversely affect either the function or the morphology of the remaining kidney, at least during an observation period of up to five years, provided that schistosomiasis was treated before kidney donation.

SLE

- If +ve family Hx.------→test for ANA(40 fold risk)
- If +ve family Hx. for SLE with thrombotic attack or livido reticularis-----→ test for APL

Sickle cell trait

- Recurrent bacteruria, pyuria, hematuria warrant testing
- Prospective donators should be warned against medullary carcinoma

Inherited renal disorders

- ADPKD
- Alport syndrome
- TBMD
- Familial FSGS

Table 61.2 Risk for Recurrence and Graft Loss After Transplantation

Type of Glomerulonephritis	Risk for Clinically Relevant Recurrence (% of patients)	Risk for Graft Failure 5-10 Years Posttransplant (% of patients)
IgA nephropathy	15%-50%	10%
FSGS	30%	20%
Membranous nephropathy	40%	15%
MPGN type I	30%-50%	15%
MPGN type II	80%	30%
ANCA glomerulonephritis	10%-15%	5%
SLE	5%	3%
Anti-GBM	<5%	Rare
Fibrillary/immunotactoid glomerulopathy	>50%	Unknown

ANCA, Anti-neutrophil cytoplasmic antigen; *FSGS*, focal segmental glomerulosclerosis; *GBM*, glomerular basement membrane; *MPGN*, membranoproliferative glomerulonephritis; *SLE*, systemic lupus erythematosus.

Challenges are what make life interesting;

Overcoming them is what makes life meaningful.

JOSHUA J. MARINE

THANK YOU